IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Syuushi NOMURA et al.** Group Art Unit: **1723**

Application Number: **10/500,042** Examiner: **Tony Glen Soohoo**

Filed: **June 23, 2004** Confirmation Number: **5201**

For: **FIELD CONVERTER AND FLUID PROCESSING DEVICE USING THE CONVERTER**

Attorney Docket Number: **042449**
Customer Number: **38834**

DECLARATION UNDER 37 C.F.R. §1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, kenei MAN, a citizen of Japan, hereby declare and state the following:

1. I graduated from Graduate school of Fisheries Science, Hokkaido University of Hakodate-shi, Hokkaido, Japan in 1996. I received a doctor's degree in connection with the study on fisheries science in 1996, from Hokkaido University.

2. I am a director of R & D center of SUZUHIRO KAMABOKO HONTEN Co., Ltd., of which address is 974, Naruda, Odawara-shi, Kanagawa, Japan.

3. I am the author of the paper entitled " Sterilization power of the water that passed through the fluid processing device" attached hereto.

4. I have reviewed and am familiar with the above-identified patent application, as well as the Official Actions dated December 1, 2006, May 16, 2007 and January 9, 2008 in the application.

Further, I note that the fluid processing device "vG7" described in the technical paper is the same device of the fluid processing device that is set forth in the description under the sub-title of example 4 of the embodiment and Figs. 6-7.

Declaration under 37 C.F.R. §1.132
Application No. 10/500,042
Attorney Docket No. 042449

5. I have reviewed and am familiar with the contents of cited reference(s), U. S. Patent Nos. 3,747,656 to Mortus, U. S. Patent Nos. 3,424,437 to Shearer, and JP09010776 by Hiromi et al., cited in the Official Actions in the above-identified application.

6. From the experimental results as set forth in the attached paper and those of the specification, I have concluded, among other things, that U. S. Patent Nos. 3,747,656 to Mortus U. S. Patent Nos. 3,424,437 to Shearer, and JP09010776 by Hiromi et al. do not teach or suggest the fluid processing device as set forth in the application, nor the results obtained by the device, nor would the device be obvious to one of skilled in the art based on the teachings of Mortus, Shearer and Hiromi et al.

The undersigned declares that all statements made herein of his own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

kenei Man
kenei MAN Ph. D.

Signed this 4 day of March, 2008.
Month Year

Certificate of Experiment 2-1

Sterilization power of the water that passed through the fluid processing device

Kenei NAN Ph.D.
Director, R & D Center
SUZUHIRO KAMABOKO HONTEN Co., Ltd.

The two (2) experiments were performed to examine the anti-bacterium activity of the νG7. The bacterium used for these experiments were as follows:

A. Klebsiella pneumoniae;
B. Serratia marcescens;
C. Bacillus sphaericus which is not exactly identified;
D. A related species of Bacillus cereusu; and
E. A lactobacillus isolated from yogurt.

Experiment 1

Methods

The bacteria suspension was passed through the νG7 and viable cell in the suspension are counted.

<Procedure>

1. Cultures being grown, bacteria suspension were obtained.
2. The viable cell in the bacteria suspension was counted by colony culture examination.
3. 0.1ml of the bacteria suspension was added to the 1,000ml of tap water.
4. 1,000 ml of the diluted bacteria solution was poured into the inlet of the νG7 and the solution flowing out by the outlet of the νG7 was collected.
5. The viable cell of the collected solution was counted by colony culture examination
6. As the blank, tap water without bacteria suspension was passed through the νG7 and the viable cell was counted by colony culture examination.

Results Experiment 1

bacteria	Viable cell in the bacteria suspension	Viable cell after passing through νG7	Medium for colony culture examination
A	1.4×10^{8}	5	SAM
B	1.6×10^{8}	0	SAM
C	8.1×10^{7}	2	SAM
D	7.0×10^{6}	5.9×10^{2}	SAM
E	9.7×10^{6}	0	BCP
Blank	----------	0	SAM
Blank	----------	0	BCP

SAM stands for standard agar medium
BCP stands for BCP agar medium

The results show that viable cells of the 4 bacteria species (A,B,C & E) in water solution diminished by passing through the νG7.

Experiment 2

Methods

Bacteria suspension was mixed with the water that passed through the νG7, after 24 hours, the viable cell was counted.

<Procedure>

1. Tap water was passed through the νG7, the water was called "νG7 water."
2. Tap water was heat treated at 121°C, then left it until the temperature of the water became room temperature. The heat treated water is called "sterilized tap water."
3. 6 test tubes putting into 5ml of the νG7 water were prepared. And also 6 test tubes putting into 5ml of the sterilized tap water were prepared.
4. 0.05ml of the bacteria suspension prepared in the experiment 1 described above was added into the νG7 water in the test tube. 0.05ml of the same bacteria suspension was added into the sterilized tap water in the test tube.
5. No bacteria suspension was added into the remained the νG7 water in the test tube. No bacteria suspension was added into the remained the sterilized tap

water in the test tube. The two were blank.
6. The test tubes were kept under 30 ℃ for 24 hours. Then, the viable cell in the solution was counted by colony culture examination.

Results Experiment 2

Bacteria	Viable cell in the νG7 water	Viable cell in the sterilized tap water	Medium for colony culture examination
A	0	2.1×10^5	SAM
B	0	1.2×10^5	SAM
C	0	1.4×10^2	SAM
D	1.6×10^3	2.7×10^2	SAM
E	0	7.9×10^2	BCP
Blank	----------	0	SAM
Blank	0	----------	BCP

SAM stands for standard agar medium
BCP stands for BCP agar medium

The results show that the νG7 gives sterilization power to the solution passing through it against the 4 bacteria spices(A,B,C & E).